

As a minimalist runner, I probably spend more time than most people thinking about the health of my feet. I've been through the process of freeing my feet from traditional running shoes and was immediately aware of the lack of strength in my arches. I also became painfully aware of how flat my left foot was when compared to my right. I assumed this was something that would self-correct over time, but after a year of minimalist running, my arch showed no signs of resurrection.

Like you, I read blogs and reviews about barefoot trends and technologies. I admit that I had seen an article about Barefoot Science insoles, but I passed it off as ironic. Someone was calling an insole a "barefoot" product. It didn't make sense, so I paid no attention.

Step forward a couple of months... I am presented with an opportunity to test a pair of Barefoot Science insoles. I immediately recognized the name and started looking for that old article. I received a call from Lance Todd, the company President, who was more than happy to talk about the science and research behind his product. He explained how his insoles activate the muscles in the arch of your foot. He also presented me with research and articles about others who had experienced strong results after just a short time using the insoles. Based on Lance's information, and his enthusiasm, I was ready to try the insoles.

#### Establishing a Baseline

Knowing that my left foot was flat and that my ankle was a bit curved, I decided to take some photos and get a paint footprint. That way, if there was a noticeable change, I'd have a clear before and after picture. Lance also requested that I do an initial test to show the immediate effects of wearing the insoles. For the test, I performed a Front Arm Raise and found my 2-rep max to be 22.5 lbs. Then, I slipped on a pair of shoes with the insoles at level 1 and walked 100 steps. I returned to the weights and re-tested my 2-rep max. This time, I was able to lift 25 lbs. with ease and was nearly able to complete 2 reps at 27.5 lbs. Based on this initial test, I experienced a 10% gain in strength simply from walking 100 paces with the insoles. Based on some of the material that Lance Todd provided, this is a typical result for first time use.

#### Getting Started

The insoles come in two styles. There is a full insole, designed to be worn in a standard shoe with removable insole. There is also a three-quarter insole that fits inside of Vibram FiveFingers or other minimalist shoes. With each style, you are provided with 6 "levels". Each level is a small insert that is placed into a hole in the bottom of the insole. The first level is the smallest and the softest. The sixth level is the largest and the stiffest. You are instructed to start by wearing the first level and progress to the next when you no longer notice the insole. This could take a week, or it could take much longer. Results seem to differ by person and the amount of time that a person spends on their feet. I was prepared to spend several weeks to a few months testing out the insoles. My biggest hope was that I'd eventually see an arch in my left foot, but I was certainly skeptical.

For the first several weeks, I had a full insole which I wore to work in my dress shoes (Yes, I work in a professional office when going barefoot is not an option). Level 1 didn't feel like it was doing much. I

felt a little like I was walking around with a cotton ball in my shoe. For the first couple of days, my feet felt a little tired by the end of the day, but nothing severe or painful. I was careful not to progress to the next level too quickly and continued with level 1 for the week.

Week 2, I stepped up to level 2. This insert was more noticeable than week 1, but still not a major change. For the first few days, I noticed the lump in my shoe as I walked and it reminded me that my foot was flexing with each step. My shoes were still comfortable and I enjoyed knowing that my foot was working. Again, my feet felt a bit dull and tired by the end of the day and I was happy to take my shoes off in the evenings and relax my feet in the recliner.

It is also worth mentioning that I was still running 4-10 miles each morning. I was completing these miles in minimalist shoes without Barefoot Science insoles because I had not yet received the  $\frac{3}{4}$  length needed for my Vibrams and New Balance Minimus.

Remaining overly cautious, I kept the insoles at level 2 for 2 weeks. I could probably have switched sooner, but I did not want to risk injuring my foot or aggravating an old bout of Plantar Fasciitis. I was training for a half-marathon, so I tried to avoid anything that might potentially derail my training plan.

Next, I am on to level 3. This is where things got more interesting. I could definitely feel the inserts at level 3 and I'd say that they were more than just noticeable. There was some mild discomfort as I walked for the first few days. My feet tired quickly and felt warm in my shoes. During the workday, I found myself slipping my shoes off for a few minutes here and there so that I could stretch my feet and cool them off.

Beyond my feet, I was also noticing some discomfort in my hips and lower back. It was as though the change in my posture when walking was forcing my hips forward. I felt some cracking and popping in my lower back when I stretched. I discussed this feeling with Lance and he suggested that the change in posture was likely not my hips pulling forward, but my shoulders coming back and more upright as I walked. It was interesting to see how my body was adapting and how small changes to my feet were affecting my upper body.

Again, I was very cautious and stayed at level 3 for a couple of weeks.

Level 4 was very similar to level 3. It started with some discomfort in both my feet and my lower back. It only took a few days before the discomfort subsided and the insoles became less noticeable.

I did note a couple of specific changes at level 4. First, when barefoot, I was now able to flex the arch of my left foot and see muscle definition. I've always been able to do this with my right foot, but my left has been flat and undefined. My feet still were not evenly arched, but this seemed like a step in the right direction. Secondly, when barefoot at home, I found myself walking more on the balls of my feet without my heels ever touching the ground. This was a second indicator that my feet were getting stronger and that proper foot strike was becoming more natural.

After a few weeks at level 4, I finally decided to test out level 5. I had been a bit concerned about level 5 based on the size and shape of the insert. Levels 1 thru 4 were small plugs that fit into the insole. Levels

5 and 6 were more like plugs on tops of platforms that fit under the insole. In my mind, I was sure this was going to be a massive change.

Level 5 was certainly a switch, but not as bad as I had imagined. It took a full week for the initial discomfort to subside. Just like levels 3 and 4, it takes a few days of walking on level 5 before you feel like you are getting used to it. I spent time at night rubbing my feet and stretching my arches. I was no longer noticing any more pain in my lower back. The muscles in my feet continued to develop and I was starting to see a bit more curvature in my left arch.

It was at this point that I received a pair of ¾ length insoles. I had been eager to run on them. I was concerned that putting the level 5 insert into my running shoe might be too much, so I decided to step back to level 3 for my morning runs and progress from there.

I learned a couple of quick lessons. First, like with a new shoe, you should really break the insoles in on a shorter run. My first run with the insoles was 5 miles in a pair of Vibram SeeYas. I did not wear an Injinji sock. Within the first 2 miles, I was noticing hot spots under my foot and by mile 3 I was running down the road with an insole in each hand. When I arrived at home, I found large, watery blisters under the arch of each foot. For the next few days, I wore a blister bandage and did all of my running with a pair of socks to prevent further rubbing.

My second lesson, keep the insoles in place. The Barefoot Science insoles come with small, Velcro tabs that you can use to secure the insole to your shoes. Chose not to use the Velcro, and that was a mistake. On one run, I found that the insole was slipping backward and the heel of the insole was moving up the back of my ankle. Again, I was forced to remove the insole during the run, and then I removed the insole from my other shoe because I felt crooked running on just one insole.

So, my words of wisdom with Barefoot Science insoles...Break them in slowly, secure them with the provided Velcro, and wear a pair of socks to protect your feet.

On a more positive note, it did not take multiple weeks to progress through the levels in my running shoes. The time that I had spent at each level in my work shoes seemed to pay off in my running shoes. I went from level 3 to 5 in less than 2 weeks and was running 30-40 miles each week with the insoles without any issue.

Finally, I move to Level 6. Level 6 is not a foam insert, but a much harder, rubbery platform. You can tell that it's there and it definitely works your foot. For the last several weeks, I've gone back and forth between level 5 and level 6 in both my walking shoes and my running shoes. I enjoy bumping up to level 6 for several days, and then giving my feet a couple of days to recover before working them out again. For me, it's similar to having a rest day after a long run. I might eventually get to the point where I can stay at level 6 for weeks or months at a time. For now, I am quite pleased with my progress.

## End Results

I mentioned earlier in the review that I was training for a half marathon. As a runner, I really wanted to see how these insoles would help, or hinder, my race results. In May, I ran a half marathon in just over 1

hour and 57 minutes. This was not a fantastic time, but was very typical for me. On September 2, just 4 months later, I ran a half marathon in 1:50:30 and set a new PR. I'll be the first to say that the insoles did not make all the difference, but they certainly seemed to help. I also found that I was less fatigued at the end of the race and that my recovery time was very brief. I ran the Disneyland Half-Marathon in Anaheim and within 2 hours of crossing the finish line, I had showered, eaten breakfast, and was walking miles through the park to stand in line for rides. I've never been able to get up and moving again so quickly.

Lastly, I took after photos and footprints. The footprint shows more change than what I can see in the photos. The red paint and carpeted photos are before shots, the blue paint and hardwood floor photos are after shots. There is enough change that can say with some certainty that the Barefoot Science insoles have brought some life back to the arch in my left foot. I still have more work to do, but I am well on my way.

### Conclusion

If you have a flat foot, or if you want to build foot strength, then the Barefoot Science insoles are for you. Also, if you want to develop better posture and better whole-body alignment, then you will see good results from this product. Go slowly, follow the directions, and be prepared to work through some discomfort. Similar to a weight lifting program, upping the level of intensity requires time, patience, work, and recovery. In the end, your body adapts, strengthens, and progresses. This product works, but it is not an instant fix. Take your time and enjoy the process.



Before Barefoot Science.



After Barefoot Science.



Image of both feet prior to Barefoot Science insoles.



Image of both feet after Barefoot Science insoles.



Image of left foot prior to Barefoot Science insoles.



Image of left foot after Barefoot Science insoles.